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Cooper, June E.

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Le document est un guide de pré-évaluation destiné aux enseignants. La pré-évaluation est un test pronostique que l'on fait passer aux étudiants avant de planifier et de donner un cours. La pré-évaluation permet à l'enseignant de mesurer ce que les étudiants savent ou ne savent pas de la matière qui doit être enseignée. Elle lui permet également de savoir si les étudiants possèdent les compétences requises pour le cours ou s'ils ont besoin de recevoir, avant le cours, quelque enseignement complémentaire ou correctif.

On peut procéder à la pré-évaluation en donnant aux étudiants des exercices écrits à compléter, en les questionnant oralement, en leur faisant passer des entrevues ou en leur demandant de faire des tâches bien déterminées. Dans tous les cas, l'activité doit être basée sur les objectifs du cours ou d'une partie du cours. La pré-évaluation doit être faite avant que le cours dans son ensemble, ou telle partie du cours, ne commence.

La pré-évaluation a une valeur diagnostique. Elle peut accroître chez l'étudiant sa motivation, l'alerter sur les difficultés, les problèmes qu'il devra affronter et lui faire éventuellement découvrir la pertinence du cours. La pré-évaluation permet à l'enseignant de sauver du temps et d'ajuster ses objectifs et méthodes d'enseignement aux habiletés et besoins des étudiants.

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HANDBOOK ON
APPLYING PREASSESSMENT TECHNIQUES
IN THE
VOCATIONAL CLASSROOM

A Module of Instruction

Prepared by

June E. Cooper, Assistant Professor

Division of Vocational Teacher Education

Faculty of Education

McGill University

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PLACE: Automotive Shop

SCENE: Teacher has gathered a group of about 12 students around a machine used for testing spark plugs.

ACTION: Teacher: "Here is a set of used spark plugs that may no longer be firing. I'll show you how we can test them to find out for sure."

"Andy, please stop talking and pay attention."

Andy: "Aw, sir, I know how to do that!"

PLACE: Typewriting Lab

SCENE: The teacher is demonstrating to beginners in the machine transcription course the correct use of the transcription machine.

ACTION: Teacher: "Well, that about covers it. Now you try it! Practice transcribing the tape I gave you and I'll come around and check how you're doing."

"Alice, what do you mean? You don't know how to type?"

WHY WAIT UNTIL SOMETHING LIKE THIS HAPPENS TO YOU!

P R E A S S E S S !

PREASSESSMENT SERVES THE FUNCTION OF HELPING YOU TO GAIN SOME MEASURE OF WHAT YOUR STUDENTS MAY ALREADY KNOW OR NOT KNOW ABOUT THE MATERIAL TO BE LEARNED.

WHAT DO YOU KNOW ABOUT PREASSESSMENT?

TAKE THIS PRETEST

INSTRUCTIONS: ANSWER T (TRUE) OR F (FALSE) TO THE FOLLOWING QUESTIONS:

1. Preassessment focuses on the terminal performance expected of the student. T F

2. Preassessment is done prior to the beginning of the course. T F

3. Preassessment is done prior to the beginning of the lesson. T F

4. Preassessment indicates whether the student needs remedial work. T F

5. Preassessment can be done by orally questioning students. T F

6. Preassessment can be done by having a student do a demonstration. T F

7. Preassessment can be done by having students complete a paper and pencil test. T F

8. Preassessment serves a diagnostic function. T F

9. Preassessment serves a teaching function. T F

10. Preassessment can take the form of an interview with the student. T F

PRETEST RESULTS

IF YOU ANSWERED "TRUE" TO ALL 10 QUESTIONS AND DIDN'T GUESS AT ANY OF THE ANSWERS, YOU MAY HAVE SUFFICIENT KNOWLEDGE OF PREASSESSMENT TO BY-PASS THE INFORMATIONAL SECTION OF THIS MODULE AND PROCEED TO THE EXAMPLES SECTION.

IF YOU ANSWERED "FALSE" TO ANY ONE OF THE PRECEDING QUESTIONS, IT IS RECOMMENDED THAT YOU READ THE INFORMATIONAL SECTION OF THIS MODULE AND THEN PROCEED TO THE EXAMPLES SECTION.

OBJECTIVES

TERMINAL OBJECTIVE:

To include preassessment as a component of the instructional process and to employ pretesting techniques in an actual school situation.

ENABLING OBJECTIVES:

1. Complete the required reading.

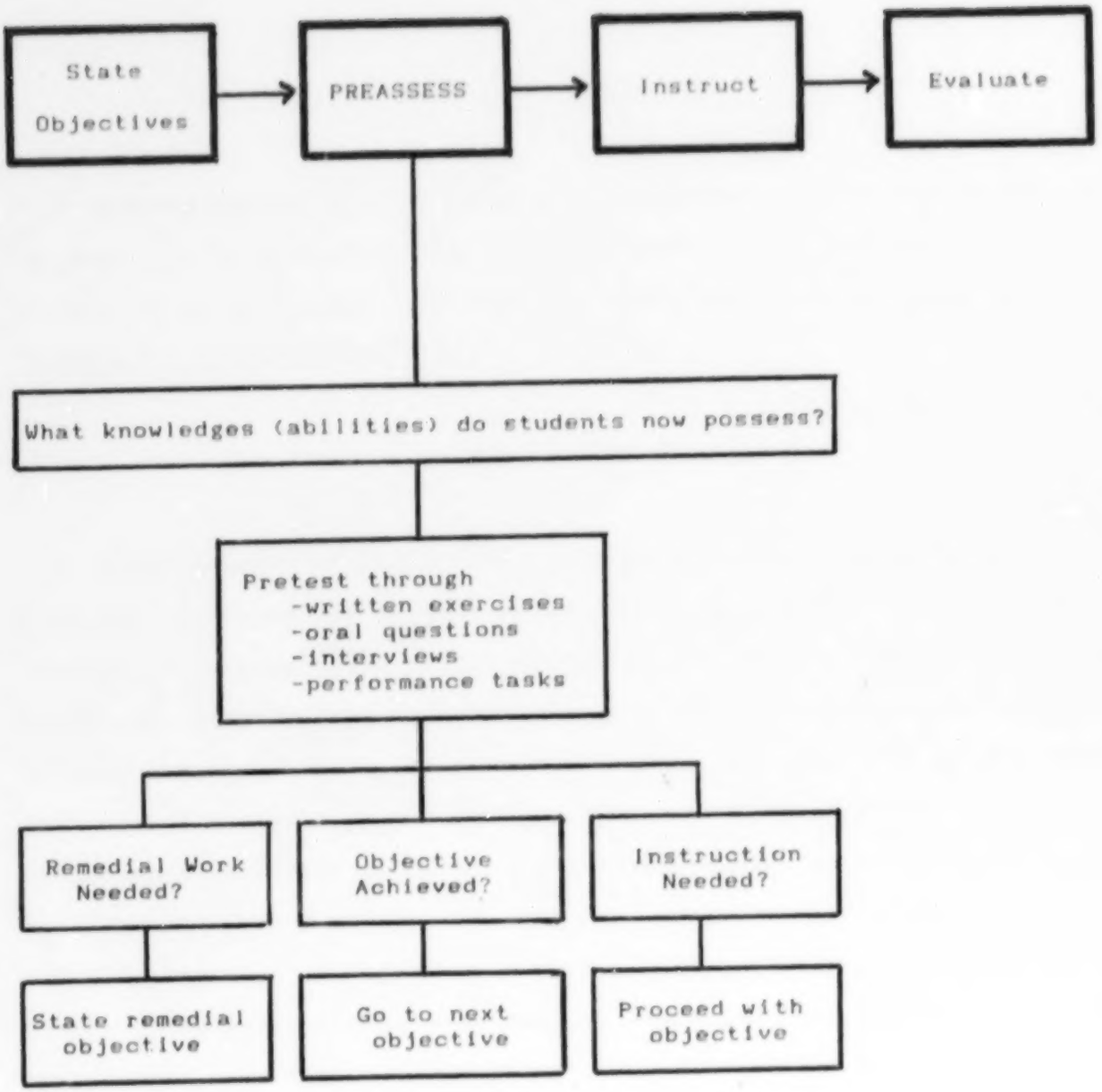
2. Employ a pretest in the form of a written exercise in an actual school situation.

3. Employ a pretest in the form of oral questions in an actual school situation.

4. Employ a pretest in the form of an interview in an actual school situation.

5. Employ a pretest in the form of a performance-type task in an actual school situation.

SITUATING PREASSESSMENT IN AN INSTRUCTIONAL MODEL



WHAT IS PREASSESSMENT?

Preassessment, or pretesting as it is often called, may be defined as questions or activities given BEFORE instruction that directly relate to the knowledge, attitude, or skill domain to be acquired (Hartley & Davies, 1976).

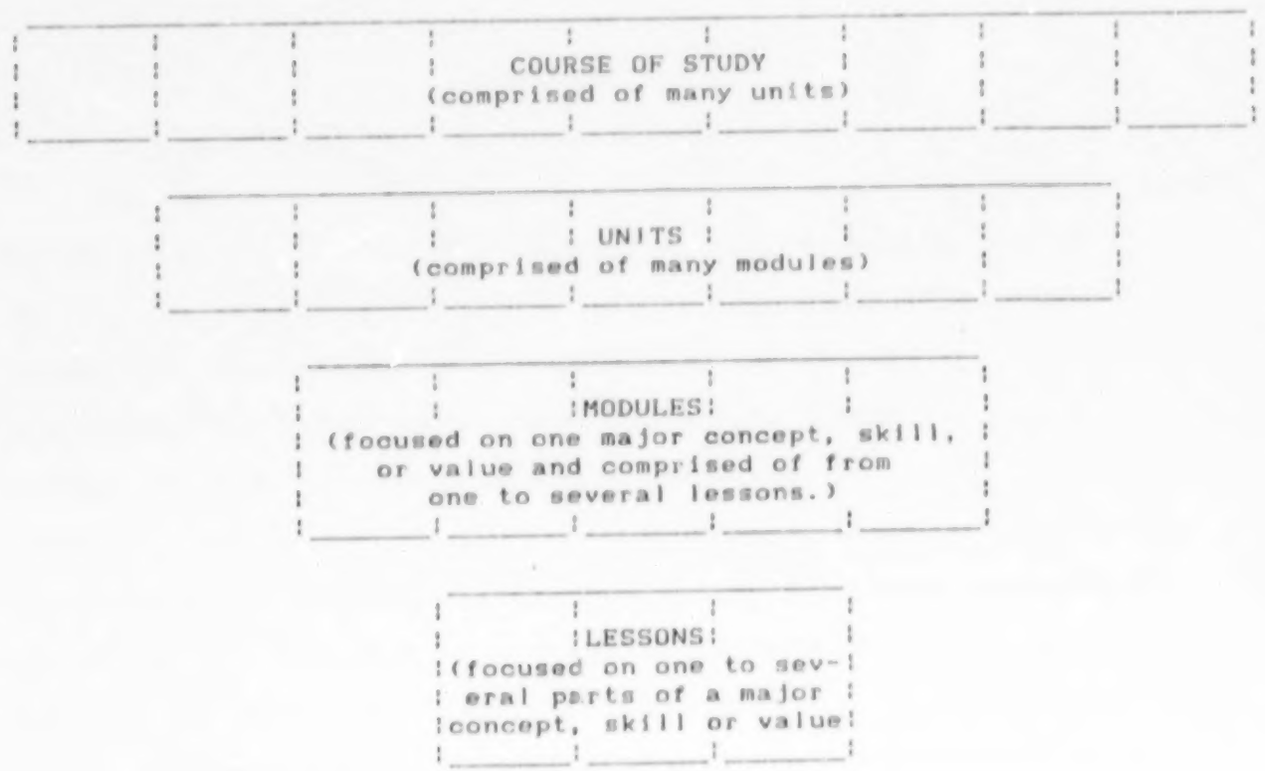
WHY PREASSESS?

Preassessment or pretesting, done prior to the beginning of instruction, helps the teacher to determine how much of what is to be learned is already known by the students, and whether students have the prerequisite behavioural capabilities for the instruction that is to follow. In other words, it performs a diagnostic function by providing data on two specific questions: Do students already possess the specified competencies? Do students need remedial work? Answers to these questions may modify the teacher's instructional plan; for example, should it be discovered through pretesting that students do not have the prerequisite knowledge to start the instruction planned by the teacher, the teacher must first plan to teach the prerequisite knowledge.

WHEN AND WHERE CAN PREASSESSMENT OCCUR?

In the model presented on page 7, preassessment is the second step in the instructional process, done after specifying the objectives. Objectives may be stated for a course of study, a unit of the course, a module of the unit, and a lesson of the module. Preassessment, then, may be done at all these points. As you can see from the diagram below, the extent of the preassessment will vary according the amount of knowledge being pretested.

State objectives and preassess before:


COURSE OF STUDY
(comprised of many units)
UNITS
(comprised of many modules)
MODULES
(focused on one major concept, skill, or value and comprised of from one to several lessons.)
LESSONS
(focused on one to several parts of a major concept, skill or value)

HOW IS PREASSESSMENT DONE?

A basic principle to follow in determining how to pretest is to approach it in the most direct, expedient way. For example, the teacher may be able to determine through a series of direct oral questions the extent of prior student knowledge on a lesson he/she is planning to teach. What is essential is that the content of the pretest be extensive enough to adequately indicate prior student knowledge vis-a-vis the stated objective of the lesson.

Pretests can take the form of

- written exercises
- oral questions
- interviews
- performance-type tasks

The method of pretesting can be the same as the method to be used in the final evaluation of an objective, and, of course, suited to whether the objective requires a largely cognitive, affective or psychomotor performance. For example, the pretest and posttest (final evaluation) for a particular objective may both take the form of written quizzes. However, this need not always be the case and in some instances, the pretest should take a different form from the posttest. For example, if the posttest involves a practical task requiring the use of special equipment, a pretest of the same nature may be neither suitable nor safe. Or in the case where the skill requiring pretesting is the student's ability to give a five-minute impromptu speech, a string of poorly done five-minute pretest speeches by each member of the class may completely inhibit student motivation. Therefore, a written pretest may be appropriate for an objective that will

ultimately be tested through oral means, and an oral pretest may be suitable for an objective that will require a practical evaluation.

In situations where it may be desirable to illustrate differences in student knowledge before and after learning, the pretest and posttest can be exactly the same test. For example, in typewriting instruction the student is asked to type a short passage as a pretest, then to practice drills designed to improve typing efficiency, and finally, to retype the same pretest passage as the posttest--the results of the pre- and post-tests are compared to determine whether the drill practice effected an improvement.

CONSIDERATIONS FOR PRETESTING

Some factors to consider in the choice of a pretest are

- the stage in the course where the preassessment is used; i.e., prior to the course, prior to a unit of the course, a module in a unit, or a lesson in a module,
- the amount of material to be preassessed,
- the nature of the material to be preassessed,
- the type of instructional objective; i.e., whether objectives are largely within the cognitive, affective or psychomotor domain,
- the time period allocated for covering the material and for pretesting,
- the facilities and aids at the teacher's disposal,
- the size of the student group.

ADVANTAGES OF PREASSESSMENT

Preassessment is best applied in those situations where the teacher needs to be alerted to what the students already know, for course planning and lesson presentation purposes; or in which students need to be alerted to what it is they do and do not know, for motivational purposes.

In addition to its primary diagnostic function, preassessment has positive side effects in that it can increase students' sensitivity to a learning situation, it can alert them to issues, problems, events, and can lead them to evaluate the task in terms of its apparent relevancy or meaning (Hartley & Davies, 1976). In other words, preassessment has a teaching function as well as a diagnostic function.

Preassessment can be a great time saver when there is enough flexibility within the course of study for the teacher to adjust instructional objectives and procedures to more directly meet the students' abilities and needs as determined by the results of the pretesting. For example, should it be discovered through a pretest that woodworking students do not possess the mathematical knowledge required to make calculations for the amount of stock to be used in their project work, then the teacher needs to plan remedial math lessons before proceeding with the project work.

Preassessment can point out major areas requiring attention at all stages of the instructional process--from the course of study to the lesson plan. What the teacher does with the feedback it provides is the key to its success.

SUMMARY

Preassessment means pretesting prior to planning or giving instruction. Preassessment provides the teacher with a means to compare the abilities students possess prior to instruction with those they will need in order to demonstrate the competencies as specified in the instructional objectives. It answers two questions: 1. "Do students already possess the specified competencies?" 2. "Do students need remedial work?"

Preassessment may be done by giving students written exercises to complete, by orally questioning them, by interviewing them, or by assigning them performance tasks. In each case, the activity is based on the stated instructional objective of a course, a unit of the course, a module of the unit, or a lesson. Therefore, preassessment may be done prior to the start of a course, the start of a unit, the start of a module or the start of a lesson, or at any other point the teacher feels is appropriate.

Preassessment serves a teaching function as well as a diagnostic function. It can increase students' sensitivity to a learning situation, it can alert them to issues, problems, events, and can lead them to evaluate the task in terms of its apparent relevancy or meaning.

Preassessment can be a time saver and can help the teacher in adjusting instructional objectives and procedures to more directly meet the students' abilities and needs.

EXAMPLES OF PRETESTS

TYPE A - WRITTEN EXERCISES

Written exercises may involve anything from objective type formats, such as multiple choice, matching, true/false or short completion questions, to subjective formats, such as essays, comprehension, and long completion type questions.

EXAMPLE 1 - ESSAY PRETEST AT THE COURSE UNIT LEVEL

Course: Marketing

Unit Topic: Consumer Protection

Unit Objective: To identify the major points to consider in determining the rights of the consumer in a free enterprise economy.

Unit Pretest: (Given as a home assignment prior to a study of the unit.)

React to the following statement, first, as a consumer, and second, as the owner of a business: "Consumer representatives should be appointed to sit on the boards of major corporations in order to protect the public."

How might the answers to this pretest help the teacher in planning activities for this unit of instruction?

EXAMPLE 2 - OBJECTIVE PRETEST AT THE LESSON LEVEL

Course: Electronics

Lesson Topic: Resistance

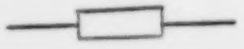
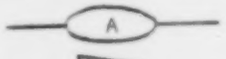
Lesson Objective: To define resistance and to represent it in diagrammatical form.

Lesson Pretest: (Handed out at the beginning of the lesson.)

The word resistance can be used to describe something in conflict: therefore, what would you assume the answers to the following questions to be? Circle the one you think is correct.

1. Resistance in an electrical conductor is
   (a) pressure behind electric flow
   (b) power resulting from electric flow
   (c) differences between AC and DC
   (d) opposing force to electric flow
   (e) amount of electric flow

2. The drawing symbol for resistance is

(a) 
(b) 

(c)
(d)
(e)

Do you see how this short pretest serves a teaching function by challenging students to make inferences? Do you think it may be motivating to the students? How might the answers be used by the teacher to launch the lesson?

ACTIVITY

Choose a course, unit, module, or lesson and prepare a written exercise to pretest students on the stated objective.

Administer the pretest at the appropriate time and analyze student responses. Write your conclusions below.

What did the pretest results tell you about prior knowledges possessed by the students?

_____

_____

_____

_____

_____

_____

How might the results affect your planning or presentation of the content?

_____

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_____

TYPE B - ORAL EXERCISES

Oral exercises may involve the teacher orally directing a series of preassessment questions to the class as a whole and asking individual students to give <u>oral</u> responses. Or they may include orally directing a series of questions to the class and asking students to <u>write</u> their individual answers.

EXAMPLE 3 - ORAL QUESTIONS REQUIRING WRITTEN ANSWERS AT COURSE PREASSESSMENT LEVEL

Course: Cosmetology

Course Objective: To acquire the basic skills for job entry into the field of cosmetology.

Course Preassessment: (Given to students prior to start of course and/or to students who may be interested in enrolling in course.)

As I ask each question, write a short answer.

(1) What does the term cosmetology mean to you?

(2) What types of work and experiences do you think you would be doing in a cosmetology course?

(3) What talents or aptitudes do you think you have that will help you in the course?

(4) What benefit to you do you believe this course will be?

Can you see advantages in posing these questions orally rather than in writing? in having students provide answers in writing?

ACTIVITY

Choose a course, unit, module, or lesson and prepare an oral exercise to pretest students on the stated objective.

Administer the pretest at the appropriate time and analyze student responses. Write your conclusions below.

What did the pretest results tell you about prior knowledges possessed by the students?

_____

_____

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How might the results affect your planning or presentation of the content?

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TYPE C - INTERVIEWS

Interviews involve talking with (questioning) one or more students in a less formal setting than the group session in the classroom.

In many vocational shops and laboratories, the individual work station structure provides the teacher with opportunities to question individual students directly at their work area or at the teacher's desk. When planned, this questioning can take the form of an interview with the student.

One way of conducting individual interviews in a shop or laboratory setting is to direct selected key questions to each student as the teacher circulates from work station to work station and to record responses on an answer sheet.

Pretesting done in the form of an interview can be more formally organized by scheduling individual student appointments with the teacher. For example, formal interviews with individuals may be appropriate prior to the start of the course or prior to each term or semester. (If students who intend to enroll in your course are identified at the end of the school year, you can arrange interviews at that time to provide you with information for course planning and preparation for the next school year.)

The interview might also be used as a follow-up or extension to a written pretest.

TYPE C - INTERVIEWS

EXAMPLE 4 - INTERVIEW WITH INDIVIDUAL STUDENTS PRIOR TO START OF COURSE

Course: Automotive Repair

Course Objective: To acquire the basic skills for job entry in the automotive repair field.

Pretest Interview: (To be conducted by the teacher.)

	Response Check Positive/Noncommittal/Negative
Why did you choose this course?	_____/_____/_____
Comment:	
What kinds of things do you think you'll be doing?	_____/_____/_____
Comment:	
Do you think you have an aptitude for or a special interest in the things you'll be doing?	_____/_____/_____
Comment:	
What previous experiences have you had that you think are related to the course activities?	_____/_____/_____
Comment:	
What do you want to achieve from the course?	_____/_____/_____
Comment:	
Overall Assessment:	

ACTIVITY

Choose a course, unit, module, or lesson objective and prepare questions to be used in interviews with individual students to pretest their knowledges, attitudes, or skills.

Administer the pretest at the appropriate time and analyze student responses. Write your conclusions below.

What did the pretest results tell you about prior knowledges possessed by the students?

_____

_____

_____

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_____

_____

How might the results affect your planning or presentation of the content?

_____

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TYPE D - PERFORMANCE-TYPE TASKS

Performance-type tasks may involve either direct or indirect observation leading either to some type of process involving an actual skill or procedure or to the production of some tangible product.

A performance-type pretest requires the teacher to observe the student as he attempts to perform, prior to instruction, an actual task or steps in a process or procedure. A note of caution in administering this type of pretest is to ensure that the uninitiated student is not subjected to performing tasks or procedures requiring the use of equipment, machines or materials which might cause the student bodily harm or damage the equipment if improperly manipulated.

Another type of performance pretest is to ask the student to produce some tangible product. For example, students in a word processing course who have had typewriting experience may be asked to produce a letter in block style to preassess their knowledge of formatting letters.

TYPE D - PERFORMANCE-TYPE TASKS

EXAMPLE 5 - PERFORMANCE PRETEST OF A PROCEDURE PRIOR TO A LESSON

Course: Word Processing

Lesson: Word Processing Software

Lesson Objective: To describe the features of word processing software and to demonstrate how the microcomputer is changed into a word processor.

Lesson Pretest: (To be used as the pretest for the second part of the objective.)

Ask a student to demonstrate booting the microcomputer with the word processing program and to describe what is happening.

When the performance is done under the guidance of the teacher, the student's demonstration can serve as an instructional aid that other students can observe (and hear).

EXAMPLE 6 - PRODUCTION PRETEST PRIOR TO A UNIT OF INSTRUCTION

Course: Nursing Assistants

Unit: Nutrition

Unit Objective: To describe the contribution an adequate diet can make to good health.

Unit Pretest: Given a copy of Canada's Food Guide, produce a seven-day menu for breakfasts, lunches, and dinners that represents an adequate diet for a young adult.

How might information of the sort produced by the pretest save the teacher time in presenting the unit?

ACTIVITY

Choose a course, unit, module, or lesson and prepare a performance-type task (process or product) to pretest students on the stated objective.

Administer the pretest at the appropriate time and analyze student responses. Write your conclusions below.

What did the pretest results tell you about prior knowledges possessed by the students?

_____

_____

_____

_____

_____

_____

How might the results affect your planning or presentation of the content?

_____

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